

ABSTRACT

A catalyst system for the polymerization of olefins comprising the product obtained by contacting:

(A) a metallocene complex;

(B) an organometallic aluminium compound of formula (II):



wherein Ar is a substituted or unsubstituted aryl group having from 6 to 20 carbon atoms; R^4 is a linear or branched, saturated or unsaturated, $\text{C}_1\text{-C}_{10}$ alkyl, $\text{C}_6\text{-C}_{20}$ aryl, $\text{C}_7\text{-C}_{20}$ arylalkyl or $\text{C}_7\text{-C}_{20}$ alkylaryl; R^5 is hydrogen or a linear or branched, saturated or unsaturated, $\text{C}_1\text{-C}_{10}$ alkyl, $\text{C}_6\text{-C}_{20}$ aryl, $\text{C}_7\text{-C}_{20}$ arylalkyl or $\text{C}_7\text{-C}_{13}$ alkylaryl group;

$x = 2$ or 3 ; $y = 3-x$; and

(C) water;

the molar ratio (B)/(C) being between 1:1 and 100:1. These catalysts show an improved activity with respect to known catalysts, wherein different aluminium compounds are used.